CPSC 4620 Project Phase 4

Querying a MySQL Database

100 pts

Due

For this stage of the Project you will use the database you built in stage 3 and create a SQL script file of common queries against the database. These should all be able to be accomplished in one query.

You will submit one SQL script file containing the following queries names queries.sql. You should consider the efficiency of your joins when writing the queries. You should not use any information not provided in the query prompt (such as looking up department numbers instead of using the name).

Queries:

1. Inventory report: For each topping in the database, show the topping name, the current inventory level and the number of X-large pizzas that could be made using that amount of the topping. Order alphabetically by topping name.
2. Revenue report: For each day, display the total revenue (the total of all the order prices for the day), the total expenses (total of all order costs of the day), and the total profit (revenue minus expenses). Order by the date.
3. Customer report: For each customer in the database, display their name, the total number of orders they have placed, the average of the order price, the total order price, the max order price, and the minimum order price. Dine in orders should not be included.
4. Dine in order report: For all dine in orders, show the average count of customers/seats per order, the average order price, the total order price, the max order price and the minimum order price.
5. Order ticket: On March 5th at 7:11 pm, Andrew Wilkes-Krier placed an order. The kitchen staff needs to know what to prepare for the order. For each pizza on the order, display the crust, size, a list of toppings, and whether or not they ordered extra of that topping. It is fine to have repeated data about the pizza (such as crust size, type) in order to display all the toppings in the table, however the information should be ordered by the pizzas so all the toppings for one pizza appear in consecutive rows.
6. Order type report: For each day and order type (delivery, pick-up, dine-in), display the total number of orders, the total number of pizzas on those orders, and the total order price of all the orders. Order by date, then order type.
7. Discount report: For each discount, display the discount name and the count of orders that used that discount, and the total money saved by customers from using that discount.
8. Inventory usage: For each topping, show the name and the total amount used (even if it is 0) on March 3rd. Order by Topping name.
9. Pizza Size report: For each Pizza size, show the total number of pizzas ordered, average price, and average cost of those pizzas.

10. Crust type report: For each crust type, show the total number of pizzas ordered, average price, and average cost of those pizzas.

Requirements

1. Create a SQL code file with the above queries that runs against your database
2. Also re-submit the files from Project 3. This will make grading easier, and allow you to make changes to your DB design.

Groups:

You may work as an individual, or work with one partner for this project. I encourage you to work with a partner. Please note that once you have selected a partner, you are only allowed to work with that partner for the rest of the semester long project. If you work with someone and decide you do not want to work with them on a later stage, you will have to work alone. So pick your partner carefully. If you work with a partner, actually work with them. Divide and conquer will not work well for this assignment. Actually discuss and work on the code together.

You may only work with one partner. Any larger groups would be violating the academic integrity rules for this class. Any groups that work together would also violate the academic integrity rules. For this assignment, there is not much that can be discussed without violating academic integrity, so it is best to not discuss it with anyone outside of your group. If working with a partner, make sure you only submit one copy that has both partner's names on it.

Submission

You will submit your assignment on Canvas.